



Configuration Audit Root Cause Analysis Status

March 12, 2002



Audit Origins

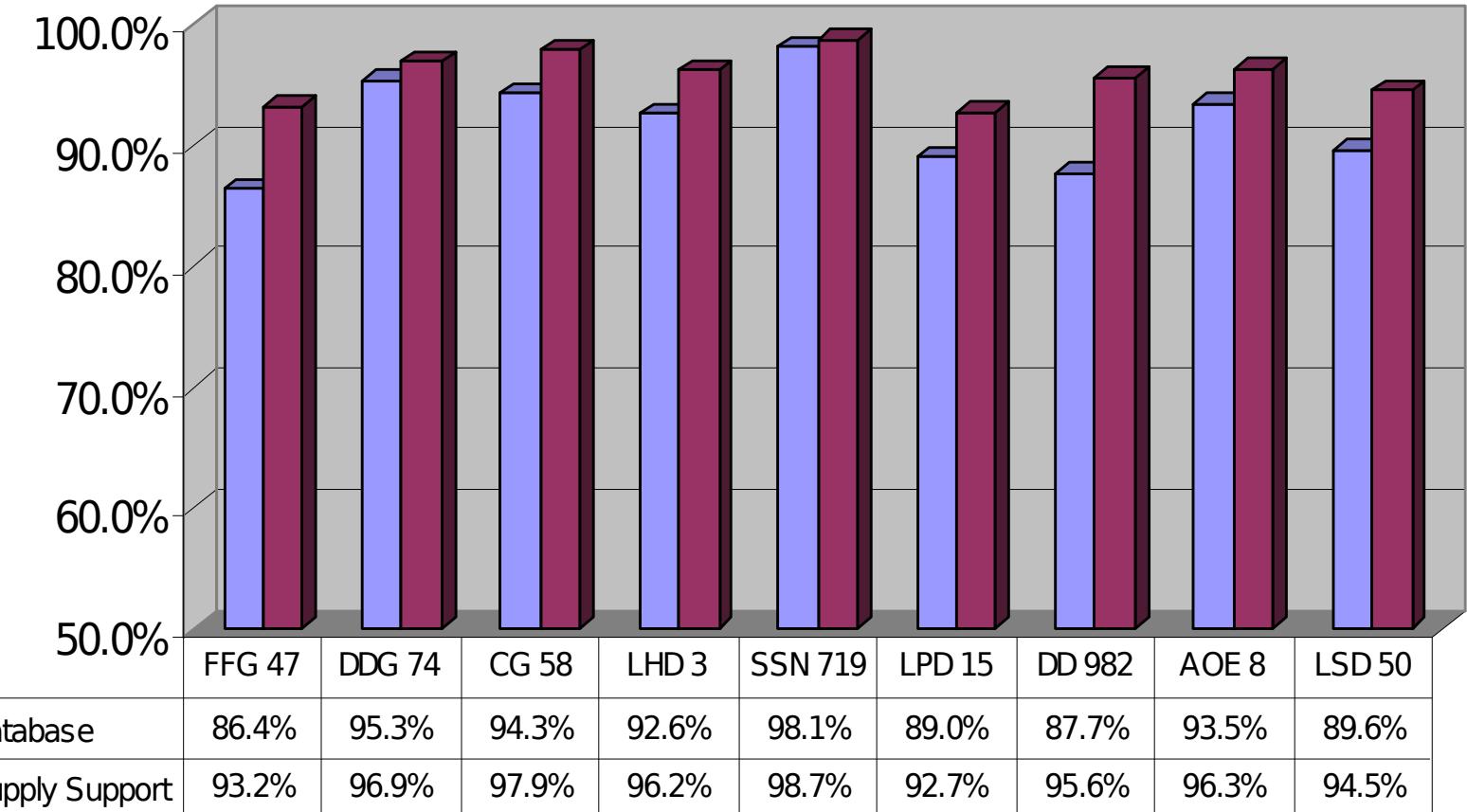
- Reinstated SCLYSIS Audits in Direct Response to Fleet Concerns
 - Integrated Ships Maintenance Supply Readiness (ISMSR) Working Group 4
 - Fleet Maintenance Executive Steering Council
- Goal: Fleet Visibility of Overall Configuration Management (CM) Health
 - Identify Root Causes of Configuration Discrepancies
 - Fix the Process (the Causes) not the Symptoms



Overview

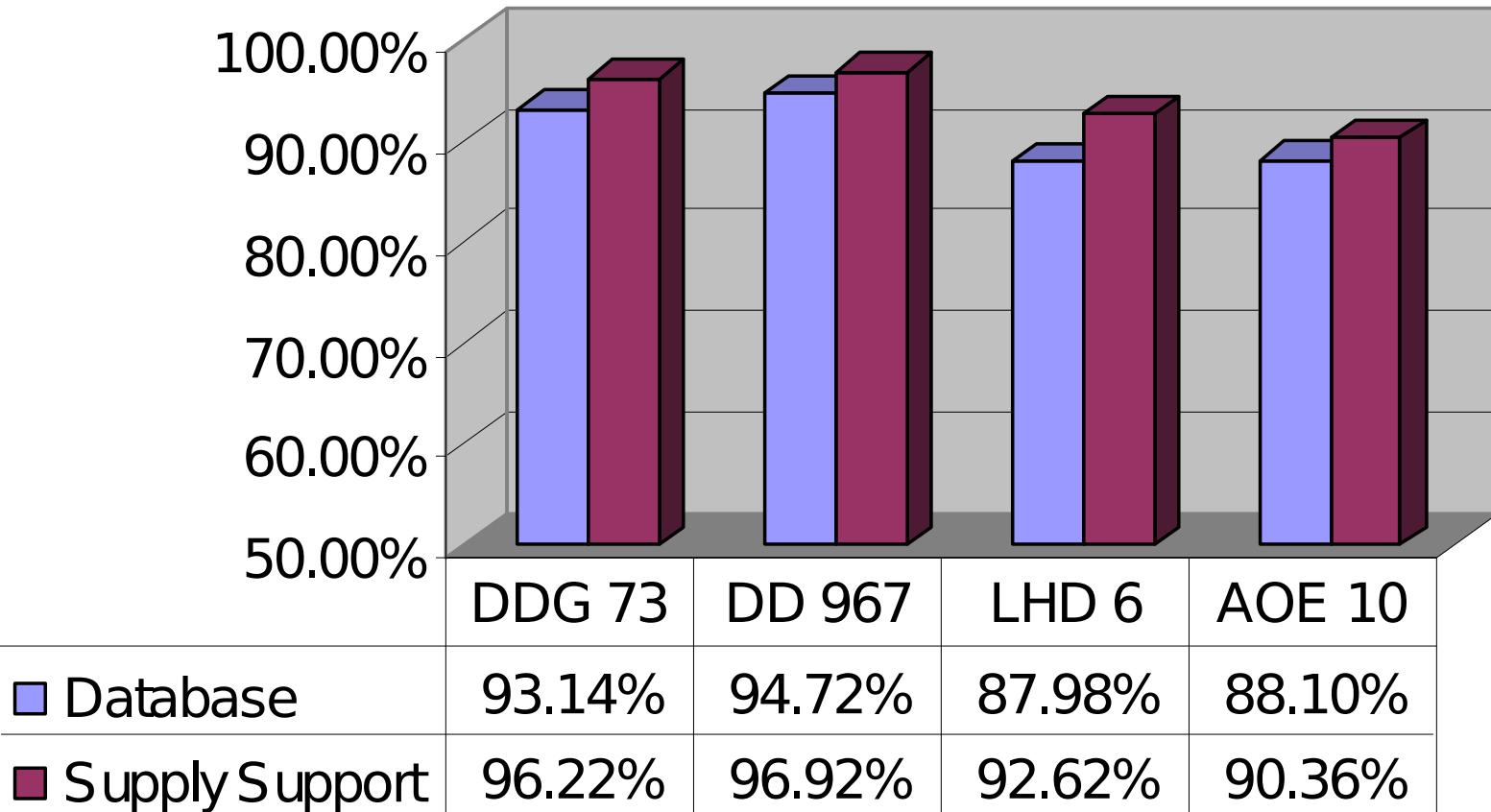
- Compiled results of Enterprise BG
 - Available for trending
- Performed audits on Stennis BG
 - 4 ships completed prior to deployment

Enterprise BG Configuration Accuracy



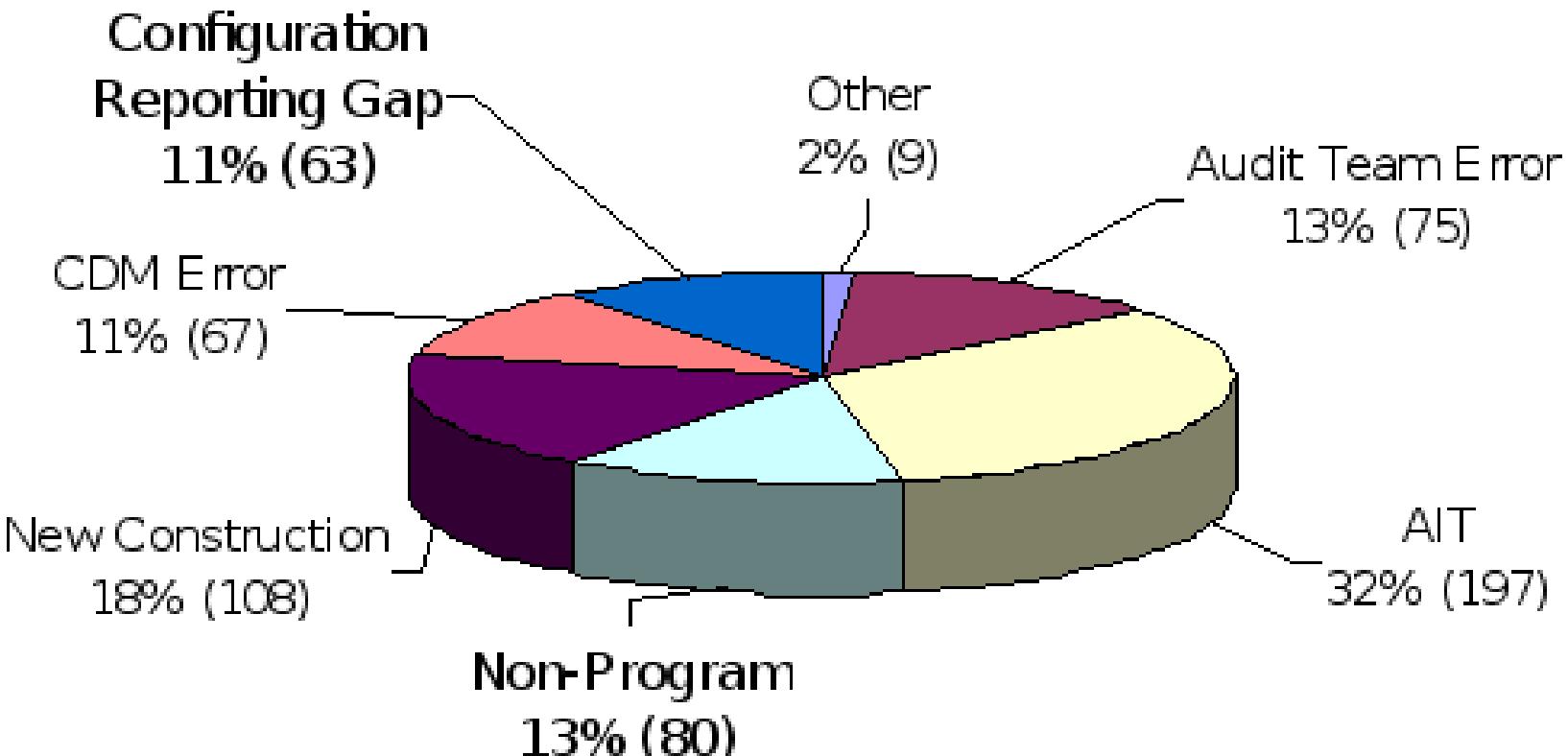
USS Enterprise, CVN 65, not shown because only electronics and ordnance equipment were audited
 Database accuracy goal of 95% for surface ships and 97% for submarines

Stennis BG Configuration Accuracy



Only four ships of the Stennis BG audited due to early deployment following 11 Sept.
Database accuracy goal of 95% for surface ships and 97% for submarines

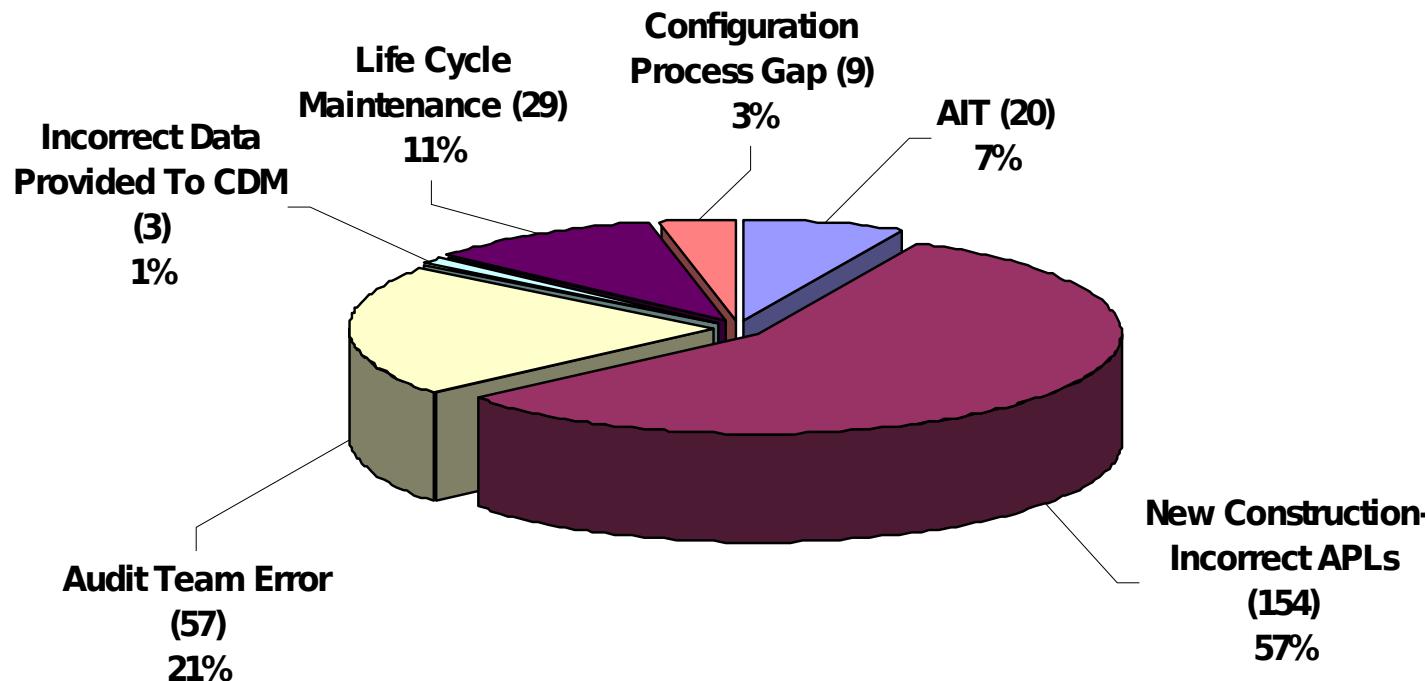
Enterprise BG Discrepancy Code Breakout



599 Total Type 2 Records

Break out based on CDM and ISEA responses

Stennis BG Discrepancy Code Breakout



272 Total Type 2 Records*

Initial break out based on CDM responses

03/06/02

* Does not include discrepancies for the LHD 6



Methodology

- For discrepancies in each reason category identify:
 - Activity responsible for reporting change
 - When the change occurred
 - Why the change didn't get properly recorded
- Trend results by;
 - Reason category
 - System
 - Installing activity
 - Ships (classes)
- Utilize trends to ID and remedy root causes with appropriate players



Preliminary Trends

- New Construction
 - AN/SYQ-7A was based on the DDG 72—the previous sister ship configuration
 - Shipbuilder bought SA-2112(V)1/STQ as Contractor Furnished Equipment
 - The AN/SRC-47 pre-planned data for the LHD 6 was never updated to reflect the upgraded system
- Standard Configuration Procedures not Followed on Some “Common” Equipment
 - Galley Equipment
 - Forklift Trucks

Preliminary Trends (cont.)

- Lack of Alteration Installation Traceability
 - Unable to Clearly Identify Which Ships, Systems and Equipments have had Alterations
 - Unable to Link Alteration Numbers with APLs
 - Many Alterations are Not Documented in CDMD-OA
- Example, secure communication equipment (TSEC)
 - Especially a problem on amphibious ships



Reporting Out

- Added additional discrepancy codes
 - More clearly describes root cause
 - Will be consistent in the future
- Reporting one accuracy number
 - reflects database errors not transactions



Summary

- Continue to conduct audits
 - Implement improvised candidate selection procedure
- Integrating random candidate generator into TOMCAT
- Need Fleet support for resolution of discrepancies



Backup Slides



Adds/Deletes/APL Changes

Enterprise Battle

Ship	Evaluated Records	True Adds	True Deletes	APL Changes	Total Failures	Database Accuracy
AOE 8	559	16	10	5	31	94.45%
LHD 3	1384	5	13	14	32	97.69%
CG 58	784	7	11	3	21	97.32%
LPD 15	440	25	23	8	56	87.27%
LSD 50	920	41	18	13	72	92.17%
FFG 47	951	16	16	22	54	94.32%
DDG 74	1022	18	11	6	35	96.58%
DD 982	675	3	27	13	43	93.63%

Stennis Battle Group

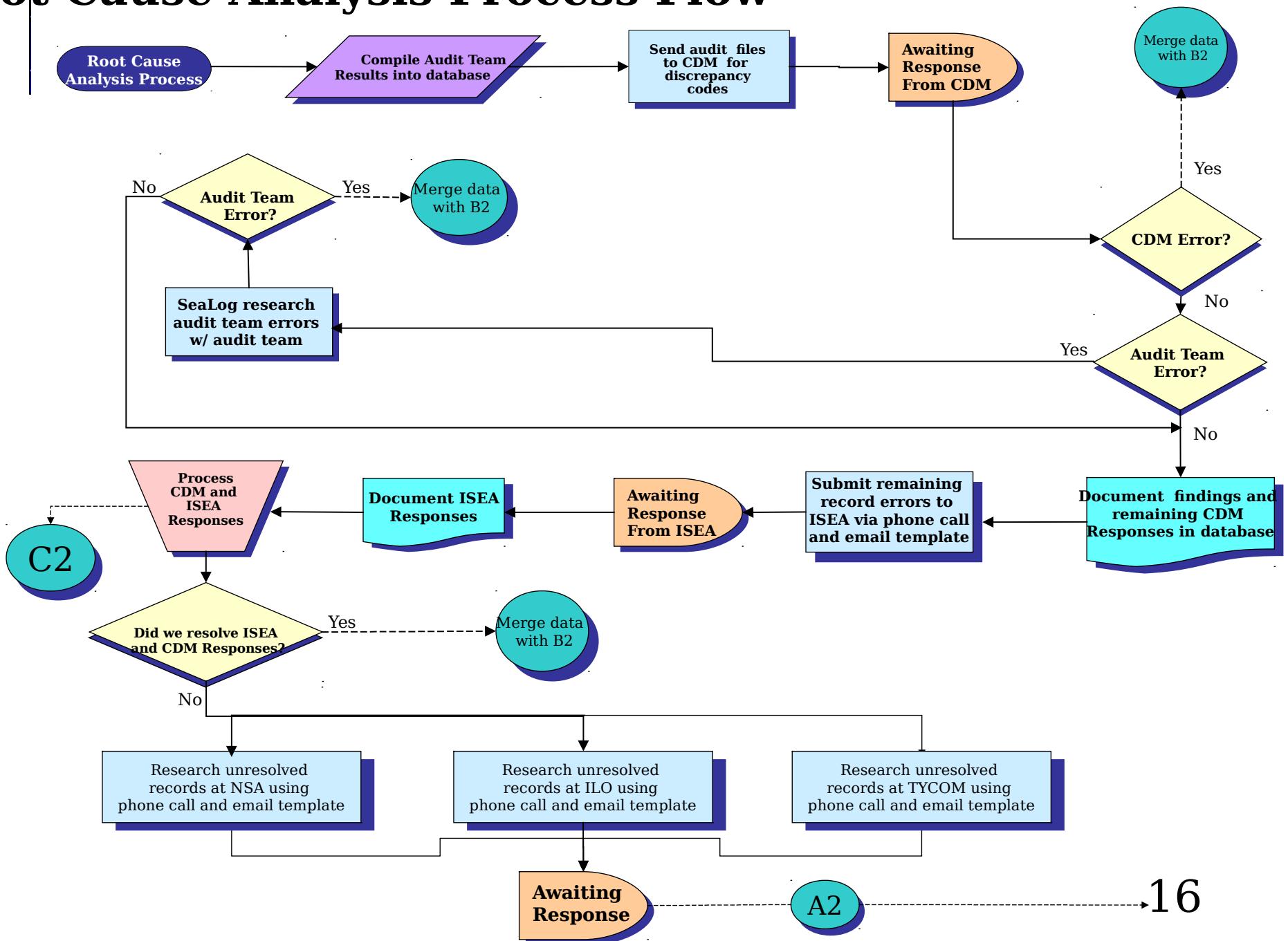
Ship	Evaluated Records	True Adds	True Deletes	APL Changes	Total Failures	Database Accuracy
AOE 10	1439	118	10	23	151	89.51%
LHD 6	2612	139	66	58	263	89.93%
DDG 73	852	11	5	22	38	95.54%
DD 967	892	11	3	17	31	96.52%



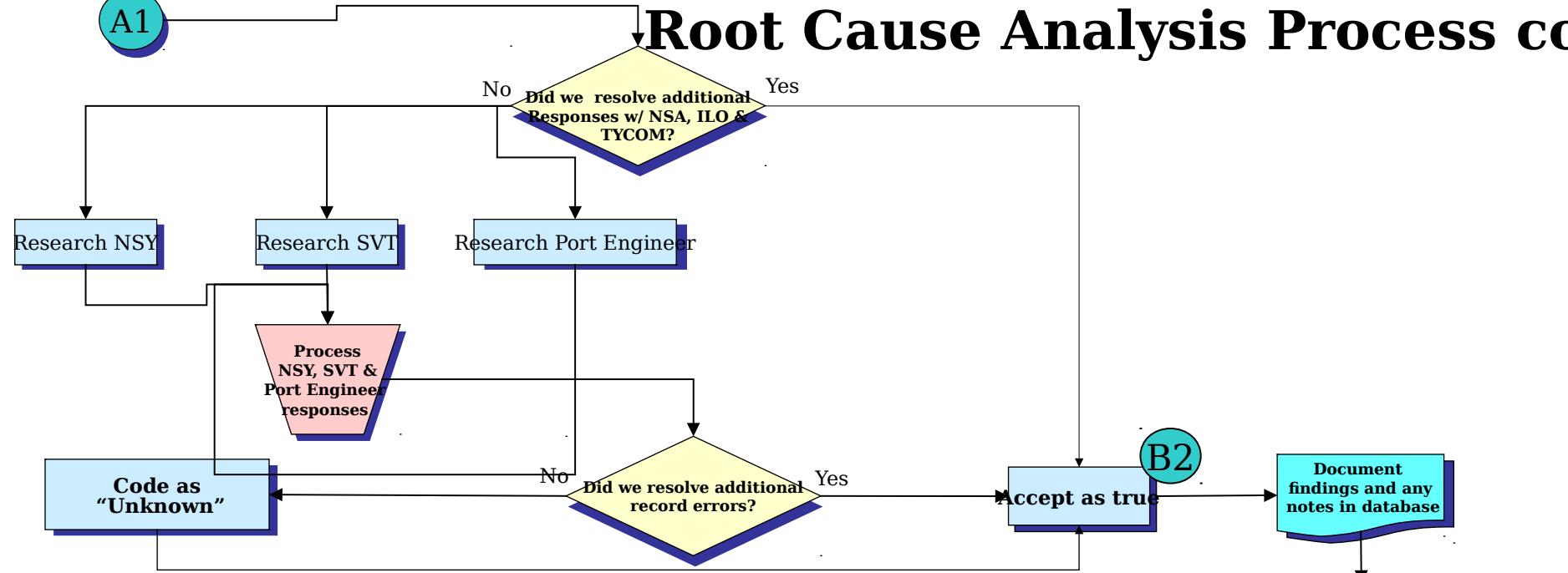
Audit Fields

- Equipment Not in File (NIF) or Not on Board (NOB)
- Quantity
- Installation Status Code (ISC)

Root Cause Analysis Process Flow



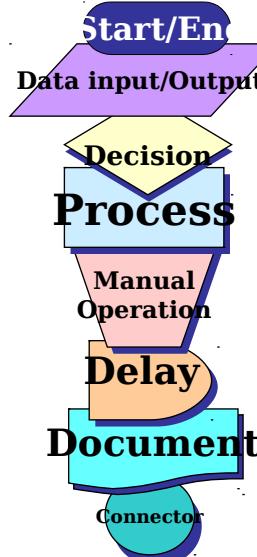
A1



Tools used to research discrepancies.

C1

Confirm responses and resolve discrepancies using:
 CDMD-OA
 SPAWAR VOP web site
 FMPMIS
 BIW web site
 Re-calling both CDM and ISEA
 NAVICP



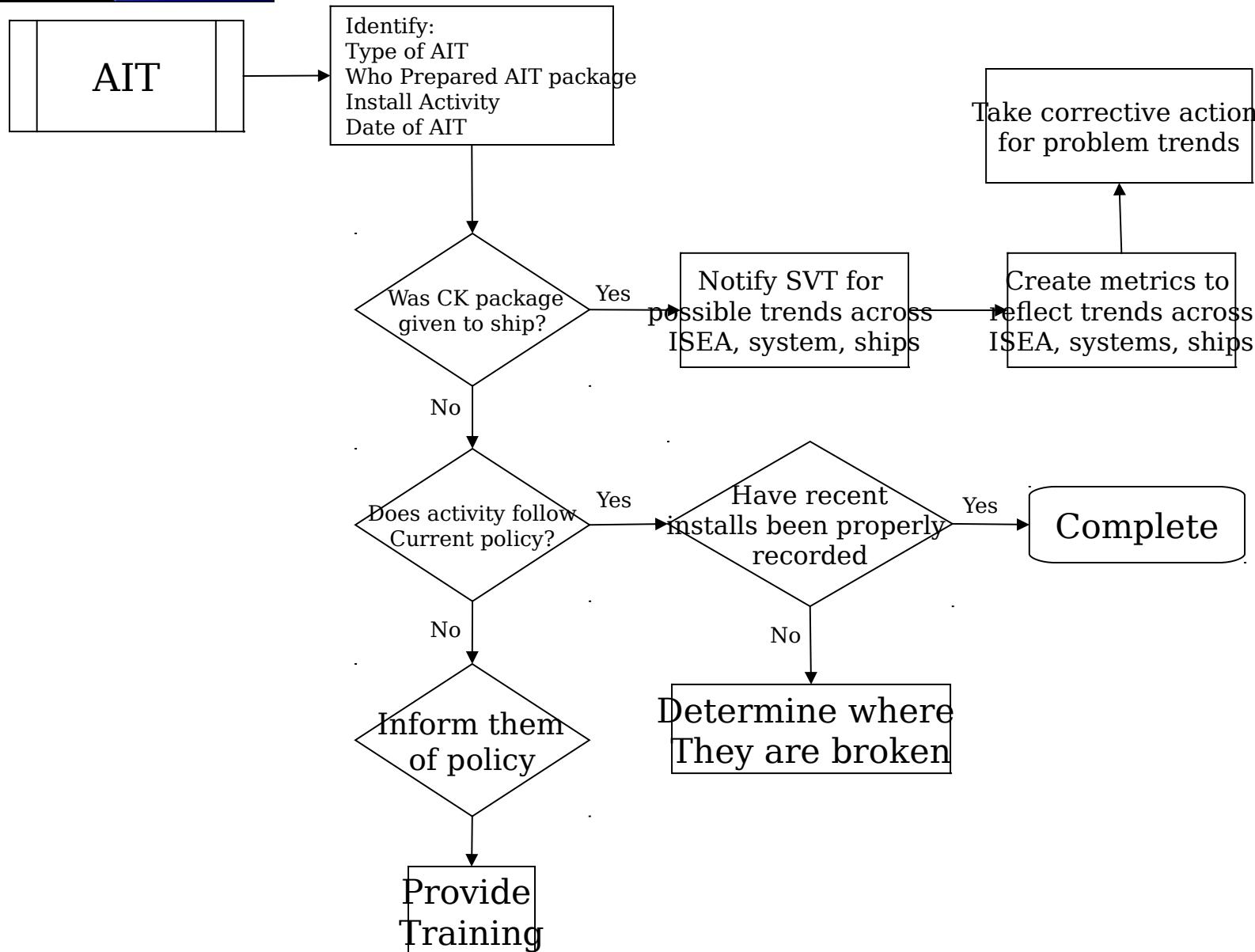
For AIT, New Construction or NPOR, see corresponding detailed process flow

Identify trends

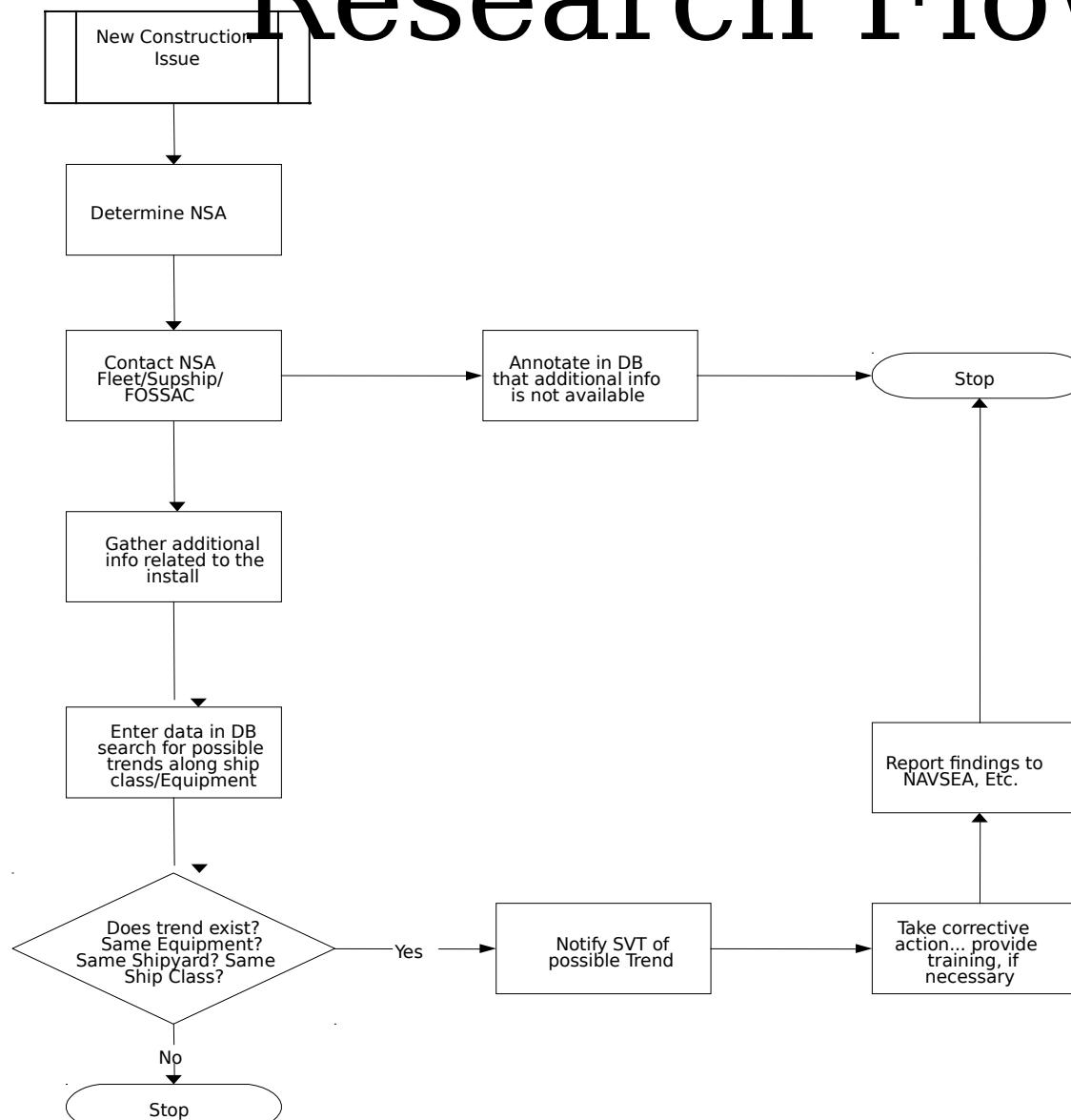
Report findings To NAVSEA 04

END

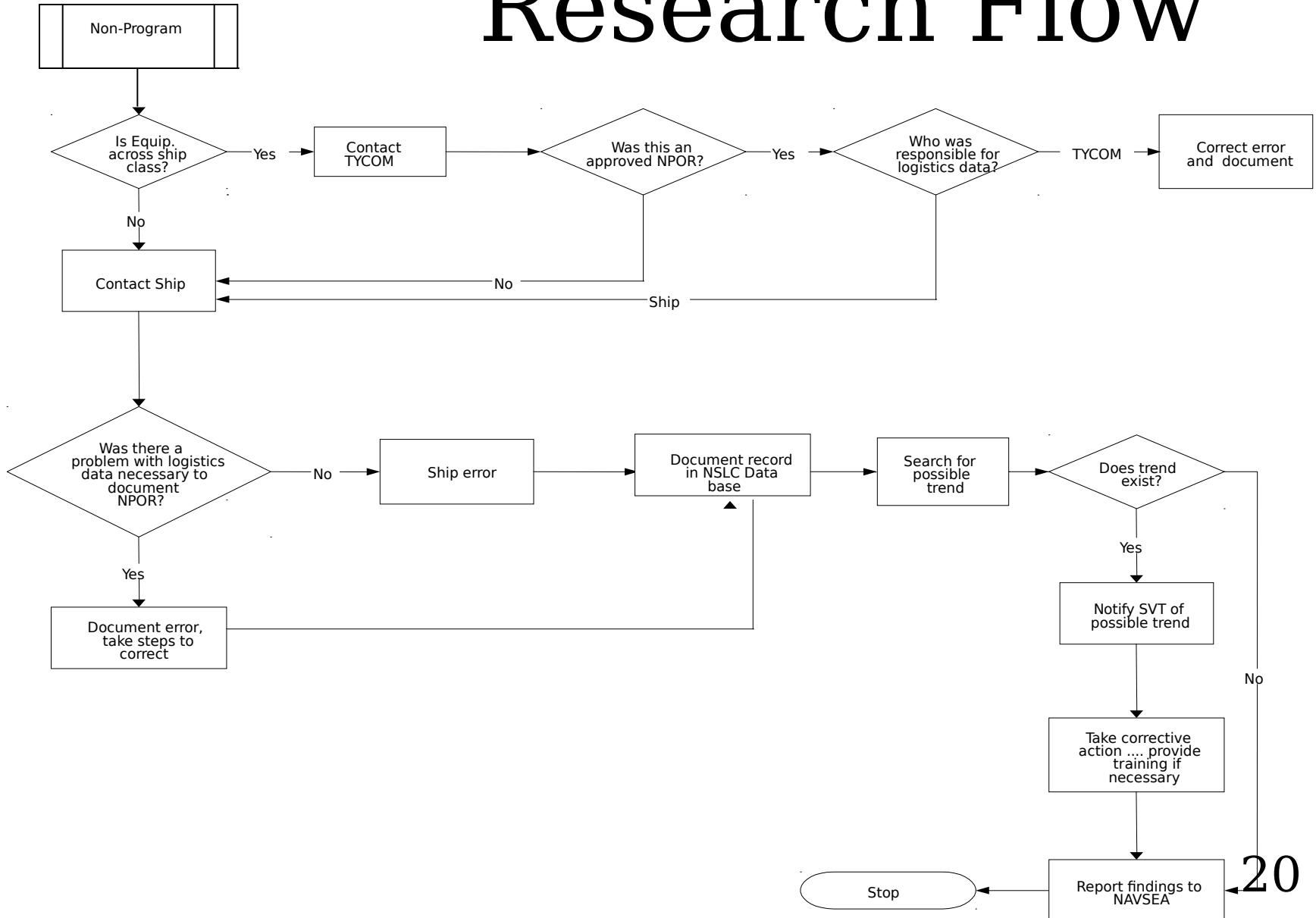
AIT Research Flow



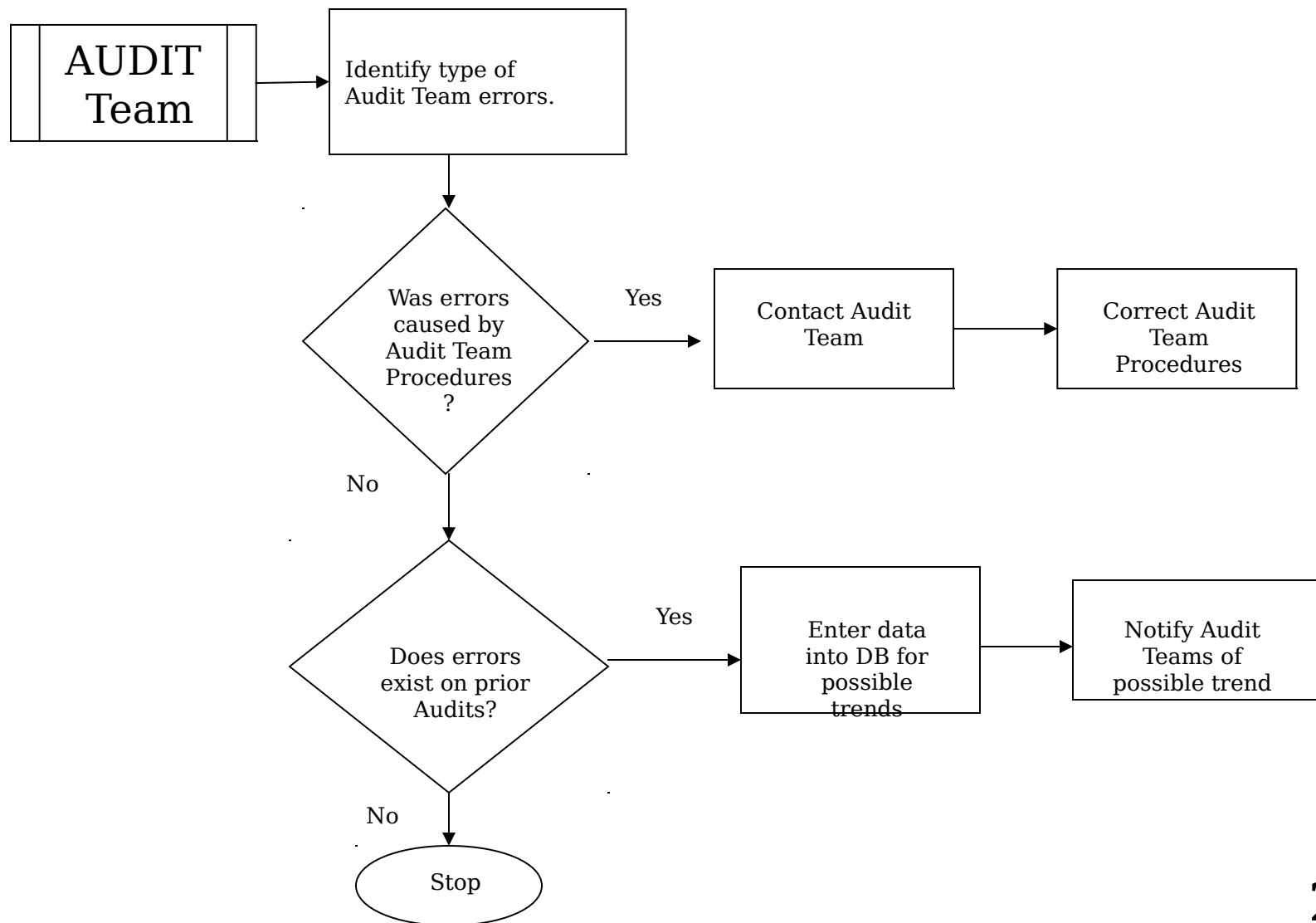
New Construction Research Flow



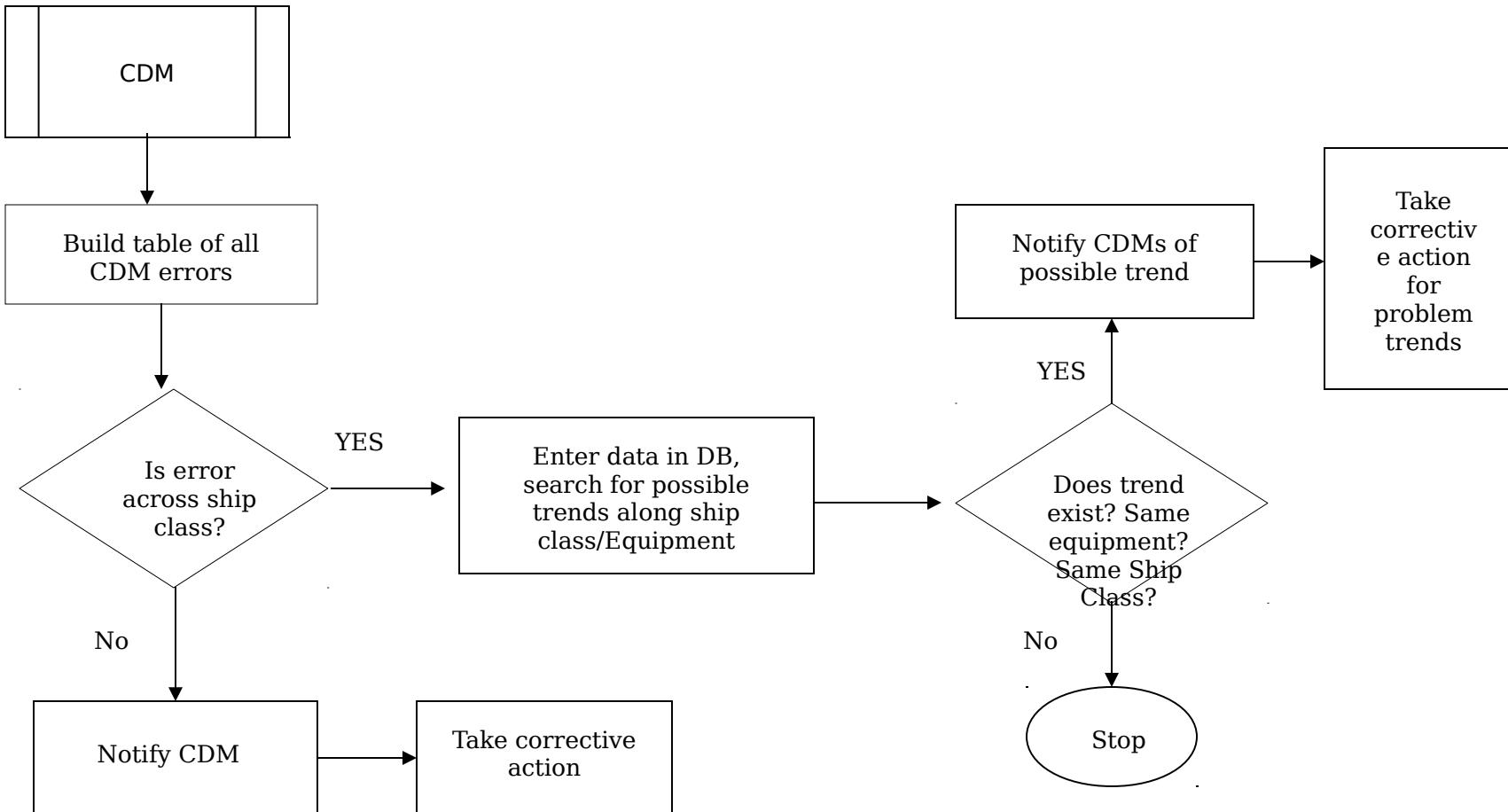
Non-Program of Record Research Flow



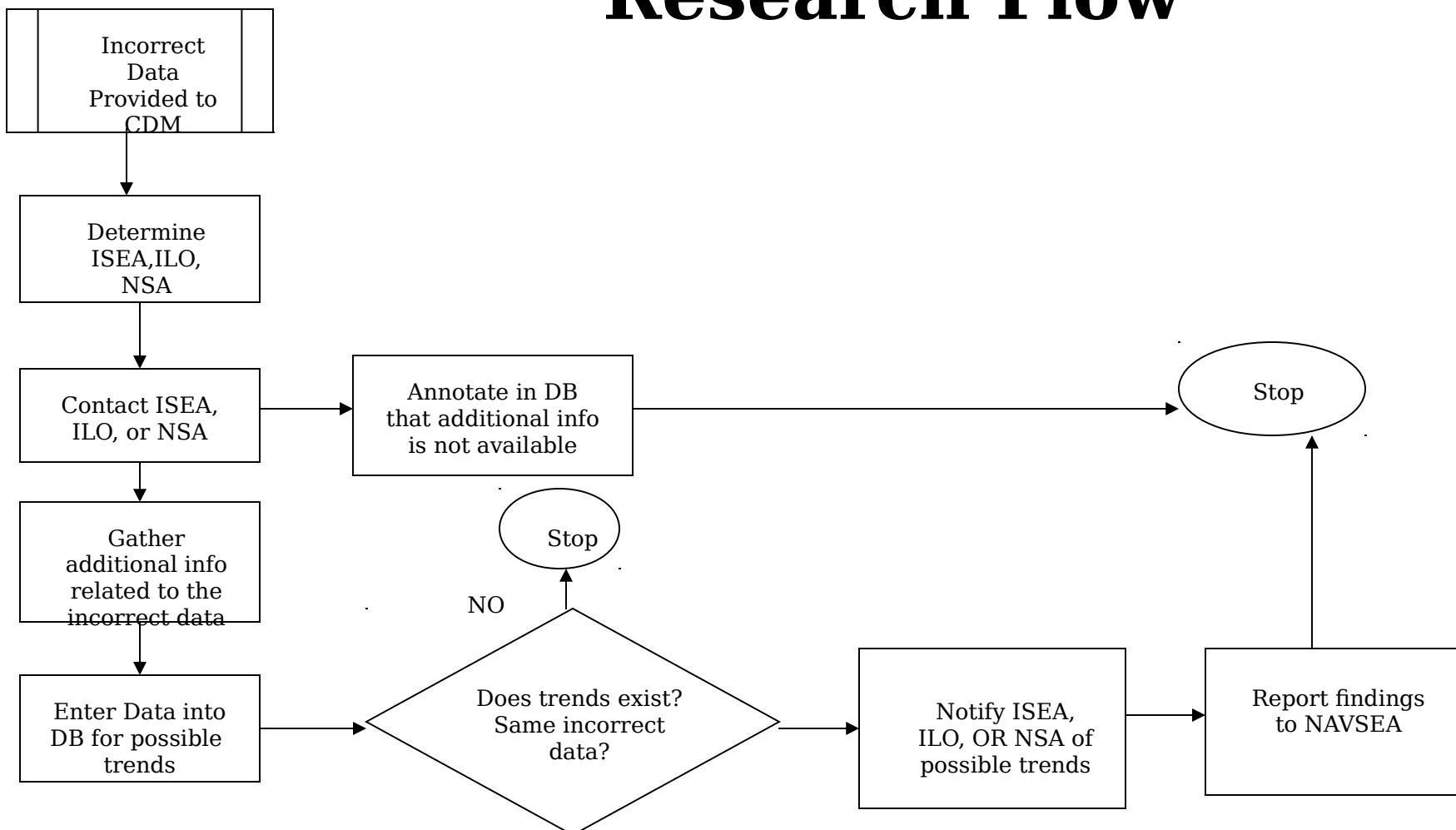
Audit Team Research Flow



CDM Research Flow



Incorrect Data Provided to CDM (ISEA, ILO, NSA) Research Flow



Life Cycle Maintenance

(Shipboard, I, D Maintenance change APLs and CKs not submitted Research Flow)

